

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

Romain Estates HOA
1 Romain Drive
Bigfork, MT 59911

2. Type of action: Application for Beneficial Water Use Permit 76LJ 30064888

3. Water source name: Groundwater

4. Location affected by project: The place of use is generally located in Romain Estates Subdivision, SW Township 26 north, Range 19 west, Lake County.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The applicant proposes to divert groundwater, by means of a 278 foot deep well (GWIC 79704), from January 1st thru December 31st at 70 GPM up to 39.6 AF, from a point in the W2SW Sec 19, Township 26 north, Range 19 west, Lake County for multiple domestic use from January 1st to December 31st and lawn/garden use from April 15th to October 15th. The applicant proposes to irrigate 11.25 acres of lawn and garden. The subdivision is a single family residential development. The Applicant is requesting enough water to accommodate 23 luxury homes that have year round residents. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

**6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)**

- U.S. Fish and Wildlife Service and Montana Natural Heritage Program: Endangered, Threatened Species and Species of Special Concern, Wetland Mapper program
- Montana Department of Fish Wildlife & Parks (DFWP); Dewatered Stream Information
- Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases
- U.S. Natural Resource Conservation Service (NRCS); web soil survey
- Montana Historical Society

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Flathead River and Flathead Lake are not listed by DFWP as chronically or periodically dewatered. Upon analysis by the Department the source aquifer and Flathead River/Lake were found to have water in excess of that requested by the Applicant.

Determination: No impact.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information Center in 2012 Flathead Lake was listed as having one or more uses impaired due to one or more of the following probable causes: mercury, nitrogen (total), phosphorous (total), polychlorinated biphenyls and sedimentation/siltation. Flathead River was categorized as having insufficient data to assess any use. The Applicant is proposing to utilize groundwater. The well is 70 feet east of Flathead Lake and hydraulically connected to Flathead Lake. Domestic use is 10% efficient, meaning 90 % of the water used for domestic purposes will return to the source aquifer or Flathead Lake. Lawn and garden use is 70% efficient meaning 30% of the water used for irrigation will return to the source aquifer or Flathead Lake. The volume of water consumed from Flathead Lake is expected to have little or no effect on the Lakes water quality. The Department found that the proposed use will not affect water quality.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

The proposed use will reduce discharge from the source aquifer to Flathead Lake in an amount equivalent to their consumptive use. Groundwater flow paths will be altered due to the proposed project. 21.2 AF of 39.6 AF of water that is diverted will eventually return to Flathead Lake. Groundwater quality will not be significantly impacted.

Determination: No significant impact.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant is proposing to use an existing well (GWIC 79704) to provide water to Romain Estates subdivision. The supply system consists of a single well, a storage tank with a capacity of 46,000 gallons and associated 6-inch distribution piping. The well was drilled by a licensed well driller (license # WWC-52) in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21. This well was completed in 1978 to a depth of 278 feet below ground surface. It has an open bottom. The well casing is 8 inches from 0-116 feet, 6 inches from 0-261 feet and 5 inches from 256-278 feet. The well will contain a Goulds Model 65L07 pump, which is a 7 stage submersible pump with a 7.5-hp motor. The pump is set 189 feet below the top of the casing and is capable of pumping 70 GPM. Water will be diverted based on the water demands of the residents. The pump is controlled by the water level in the storage tank, when it gets low the pump will turn on and continue pumping until a set water level is reached. The water tank is located to the east of the well on a hill and at full pool is 157 feet above the well head. Approximately 2,100 feet of 6-inch main line supplies the system. Each home will tap into the main line with a one-inch tapping saddle. No water will be discharged from the subdivision. Return flows from lawn and garden irrigation and individual septic systems will occur. A 2-inch Hersey Model MVR 160 magnetic drive vertical turbine meter with totalizer will measure water. The flow meter is located immediately following the pump and all diverted water from the source will be measured. The proposed project shall not impact any channels, barriers, riparian areas and dams. Flow paths to surface waters and within the aquifer will be modified; however modeling done by Department hydrogeologists show that no significant negative impact will occur to existing water users and surface/groundwater resources.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

The Montana Natural Heritage Program and DFWP websites were reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project.

According to the Montana Natural Heritage Program in Township 26N, Range 19W there are four plant species of concern, Beck Water-marigold (*Bidens beckii*), Lake-bank Sedge (*Carex lacustris*), Blunt-leaved Pondweed (*Potamogeton obtusifolius*) and Pod Grass (*Scheuchzeria palustris*). All are found in northwestern Montana. Beck Water-marigold is thought to be more abundant than what current data suggests. Lake shore development, boating activity and aquatic weeds are possible threats to the plant. Little is known about Lake-bank Sedge, only a few occurrences have been noted in Lake County. Blunt-leaved Pondweed occurs mostly on national forest lands; therefore the proposed project will not impact either species. Pod Grass is found in fens and wetlands west of the Continental Divide. The majority of populations are on National Forest lands or MT State Trust Lands. This subdivision has been developed and disturbed for over 30 years, impact to any of the four sensitive plant species has most likely already occurred.

The Canada Lynx (*Lynx Canadensis*), Grizzly Bear (*Ursus arctos*) and Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the Flathead Lake to maintain existing populations of Bull Trout. Development has existed on this section of lakeshore for sometime; any impacts to sensitive mammal species most likely has already occurred. The proposed project will not impact any threatened or endangered fish, wildlife, plants and aquatic species or any species of special concern.

Determination: No significant impact.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: N/A, project does not involve wetlands or critical riparian habitats

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

According to soil survey data provided by the NRCS, soil within the place of use consists mostly of very gravelly loam that is excessively drained. Soils around Flathead Lake are not susceptible to saline seep. Using water from Flathead Lake for domestic and lawn/garden use will not cause degradation of soil quality and stability.

Determination: No impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Any impacts to existing vegetation will be within the range of current disturbances due to current development within the subdivision. No land will be disturbed due to this application, therefore noxious weeds are not expected to be established or spread.

Determination: No impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. No air pollutants were identified as resulting from the applicants proposed use of Flathead Lake water.

Determination: No impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A, project is not located on state or federal land.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

All impacts to land, water and energy have been identified and no further impacts are anticipated.

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is located in an area with no locally adopted environmental plans.

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No impact.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

There should be no significant negative impact on human health from this proposed use.

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No x If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.
- (k) Other appropriate social and economic circumstances? None identified.

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. Describe any mitigation/stipulation measures: None identified.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: No reasonable alternatives were identified in the EA.

PART III. Conclusion

1. Preferred Alternativ: None identified.

2 Comments and Responses: None.

3. Finding:

Yes___ No **x**___ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Melissa Brickl

Title: Hydrologist/Water Resource Specialist

Date: April 12, 2013